論　文　全　文　要　約

The influence of coping types on post-traumatic growth in patients with primary breast cancer

（原発性乳がん患者の心的外傷後成長に対するコーピングタイプの影響）

主指導教員：岡村　仁　教授

（医系科学研究科　精神機能制御科学）

藤本　　智美

（医歯薬保健学研究科　保健学専攻）

Abstract

Background: The physical and mental impacts of breast cancer diagnosis in women are substantial. Several studies have investigated the negative mental health effects of breast cancer. However, in recent years, there has also been growing interest in posttraumatic growth, a positive response to stressful events. Considering positive psychology focuses on such virtues, proactive coping theory was chosen as a theoretical guide. This study investigates how breast cancer patients' posttraumatic growth is associated with proactive coping and mental well-being.

Methods: A self-administered questionnaire survey was conducted with 80 breast cancer patients aged 20 to 70 years attending an outpatient clinic. The survey was conducted using the Posttraumatic Growth Inventory-Japanese version (PTGI-J), Proactive Coping Inventory-Japanese version (PCI-J), and the Japanese version of the General Health Questionnaire (GHQ). Single regression and a multiple regression analysis with PTGI-J as the dependent variable were performed.

Results: The multiple regression analysis extracted proactive coping (P=0.006), emotional support seeking (P=0.004), and avoidance coping (P=0.001) as factors associated with posttraumatic growth in breast cancer patients.

Conclusions: These results suggest that using proactive coping for conflicts caused by a breast cancer diagnosis and temporary avoidant coping for daily stresses during the treatment process may enhance posttraumatic growth while preventing deterioration in mental well-being. Additionally, seeking emotional support is important for posttraumatic growth.

Key words: breast cancer; posttraumatic growth; proactive coping; mental well-being

Introduction

Although advances in medicine have improved the survival rate of cancer patients, receiving a cancer diagnosis can still be traumatic. The reason for this is that is that cancer patients experience a variety of issues, including fears and uncertainties about the future, invasive medical procedures and their side effects, pain and malaise, as well as changes in social roles and interpersonal relationships (1). Previous studies have reported that approximately 18% to 20% of cancer survivors aged 40 and older experience anxiety symptoms, that women are at twice the risk of anxiety than men, and that their fears and distress about anxiety, depression, and cancer may persist for 10 years after treatment (2). Additionally, a cancer diagnosis can also lead to posttraumatic stress disorder (PTSD) (3).

The physical and mental impact of breast cancer on women is substantial, with 25–30% of them reporting depression 1–2 years after mastectomy (4). There are many reports on the effects of such stressful events, which include both negative as well as positive outcomes. For example, regarding the stress experiences of individuals and their resulting growth, Park et al. (5) indicated that individuals can acquire positive self-concepts from stress-related growth (SRG) as well as from routine stress, leading to personal growth. Posttraumatic growth (PTG) (6) and benefit finding (7), defined as positive psychological changes resulting from mental struggles with crisis events and difficult experiences, have also been considered as positive aspects of stressful events. These concepts capture people's experiences of finding benefits in challenging events, such as their own strengths and greater bonding with others (3).

Other useful concepts such as stress-coping behavior, problem-focused coping, and emotion-focused coping, which coordinates unpleasant emotions generated under stressful situations (8), are well studied in the literature. In recent years, the Proactive Coping

Theory (9) has been proposed in the field of positive psychology. This theory, which captures cognitive appraisal and coping with changing events after facing stress, includes four types of coping: reactive, anticipatory, preventive, and proactive. Based on this theory, the Proactive Coping Inventory (PCI) scale was developed by Greenglass (10).

Regarding the differences between conventional and proactive coping, Usami (11) pointed out the following three points: 1) while conventional coping is an effort to deal with stressors that have already occurred, proactive coping is directed to the future, and includes efforts to promote challenges and personal growth; 2) while traditional coping mainly involves risk management when a negative appraisal of threats and harms is made on stress, proactive coping involves goal management with stress as an opportunity for challenges and growth; and 3) while conventional coping is triggered by negative appraisals on requests from the environment, proactive coping is triggered by more positive motives. However, research on proactive coping is currently scarce (12–15), and to our knowledge, there is no research available on proactive coping in subjects with cancer (16).

It is presumed that many cancer patients undergo personal growth while confronting the disease. However, the characteristics of PTG and proactive coping in cancer patients are not well characterized; it is important to examine these aspects because cancer patients not only face the impact of being diagnosed with cancer, but also the subsequent treatment and side effects, relationships and economic issues, and uncertainties surrounding a potential recurrence. Therefore, this study aimed to determine how PTG in breast cancer patients is associated with proactive coping and mental well-being. Exploring these relations can help in the development of educational intervention methods that promote coping competence as stress management. Furthermore, internal growth can be expected through educational interventions on stress management, which can contribute to the improvement

of breast cancer patients' quality of life (QOL).

Patients and Methods

Study participants and eligibility criteria

Subjects were outpatients at University X Medical School Hospital and met the following criteria: 1) aged 20 to 70 years with a first diagnosis of breast cancer between April 1, 2010, and March 31, 2018 (this time period was selected because, in consultation with a physician, the recommended duration of hormone therapy after surgery for breast cancer was 5 to 10 years); 2) undergoing initial treatment for breast cancer and adjuvant treatment such as radiotherapy, chemotherapy, and hormone therapy on an outpatient basis, or having completed initial treatment and being followed-up on an outpatient basis; and 3) the treatment content during hospitalization and the stage at the diagnosis were not regarded. Patients with advanced cancer who were in a physically and mentally difficult condition to answer a questionnaire survey were not included. Sampling was performed continuously from December 2017 to July 2018.

Ethical considerations

This study was conducted with approval from the Institutional Review Board of Shiga University of Medical Science (approval number: 29-007). The researchers informed the subjects of the purpose and method of the study, explained the consent form, and that they could withdraw both verbal and written consent at any point. Envelopes containing a questionnaire, the consent form, and the withdrawal of consent form were distributed. Consent to participate in the study was obtained by returning the signed consent form and the questionnaire.

Survey items

1) Basic attributes

Data about patients' gender, age, marital status, form of residence, number of close friends, time since diagnosis, and stage at diagnosis were collected.

2) PTG

The Posttraumatic Growth Inventory-Japanese version (PTGI-J), which has been verified for reliability and validity by Taku et al. (17), was used. This scale assesses the positive psychological changes that arise as a result of mental struggle with crisis events and difficult experiences. It consists of 18 items comprising 4 subscales relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. Scoring is based on a 6-point Likert scale (0–5 points) ranging from "never experienced at all" to "very strongly experienced," with total points calculated for each of the four subscales.

3) Stress coping

The Proactive Coping Inventory, Japanese version (PCI-J) was used (18). It consists of 7 subscales comprising 55 items of proactive coping, reflective coping, strategic planning, preventive coping, instrumental support seeking, emotional support seeking, and avoidance coping. Scoring is based on a 4-point Likert scale (1–4 points) ranging from "not at all applicable" to "highly applicable" and a total score is calculated for each subscale. The scale has been verified for reliability and validity by Kawashima (19).

4) Mental well-being

A shortened Japanese version (21) of the General Health Questionnaire (GHQ) produced by Goldberg et al. (20) was used. The shortened version consists of 28 items

comprising 4 factors, namely physical symptoms, anxiety and insomnia, social activity impairment, and depressive tendencies. Two types of scoring forms were available (0-3 points) and the GHQ method (0-0-1-1 points) with four options ranging from “good” to “very bad.” The GHQ method was adopted in this study. The cut-off point of the score of the GHQ28 is 5/6 points, and those scoring five or less are considered healthy while scoring six or more is indicative of problems.

Statistical analysis

The normality of the data was checked. The basic attributes of the subjects, the mean and standard deviations of each variable, and Cronbach’s alpha coefficients were calculated through descriptive statistics. Each basic attribute was divided into two groups, and a *t*-test was performed to assess its association with PTGI-J scores. Pearson correlation coefficients between PTGI-J, GHQ and PCI-J were calculated. In addition, Pearson correlation coefficients between “time since diagnosis,” “stages at diagnosis,” PTGI-J scores, GHQ, and PCI-J subscales were calculated. Associations between PTGI-J and basic attributes, time since diagnosis, stages at diagnosis, PCI-J, and GHQ were examined using a single regression analysis, followed by a multiple regression analysis using the forced input method with PTGI-J total score and each subscale score as the dependent variable and variables found to be associated in single regression analysis as the independent variable.

The statistical analysis software SPSS Ver. 25 was used, and the significance level was less than 0.05.

Results

Questionnaires were distributed to 120 individuals diagnosed with breast cancer within the recruitment period who met the inclusion criteria and provided consent to participate in the study; 80 participants returned their questionnaires (66.7% recovery rate). All returned questionnaires were included in the analysis (100% effective response rate).

Basic attributes of the subjects and descriptive statistics for each variable

The basic attributes of the subjects are shown in Table 1. The score ranges, mean values, standard deviations, Cronbach's alpha coefficients of PTGI-J, PCI-J, and GHQ items are shown in Table 2.

Most subjects were older than 40, except for one subject in their 30s. Less than 5 years accounted for 95% of the time since breast cancer was diagnosed, and approximately 80% was Stage 0-II (Table 1).

The mean PTGI-J and GHQ total scores were 38.60±20.14 and 5.15±4.68, respectively. The Cronbach's alpha coefficients for each scale item were all greater than or equal to 0.70 (Table 2).

Correlation between PTG and GHQ, PCI-J

In the association between PTGI-J and GHQ scores, there were significant negative correlations between PTGI-J total score and impaired social activity and depressive tendency (Table 3). Moreover, there were significant positive correlations between the PTGI-J total score and all subscales of the PCI-J in the association between PTGI-J and PCI-J (Table 4).

Associations between time since diagnosis, stage at diagnosis, PTGI-J, GHQ, and PCI-J subscales

There were no significant correlations between time since diagnosis and other subscales. Significant negative correlations were found between stages at diagnosis and proactive coping, reflective coping, and strategic planning. There were no significant correlations between time since diagnosis, stages at diagnosis, PTGI-J, and GHQ subscales (Table 5).

Factors associated with PTG (single regression analysis)

When PTGI-J was compared by dividing each basic attribute into two groups, no significant differences were found for any of the items (Table 6). In relation to PTGI-J and PCI-J, significant positive correlations were found between the PTGI-J total score and the PCI-J proactive coping, reflective coping, strategic planning, preventive coping, instrumental support seeking, emotional support seeking, and avoidance coping. In relation to the PTGI-J and GHQ, there were significant negative correlations between PTGI-J scores and GHQ social activity impairment and depressive tendency. There were no significant correlations between PTGI-J and stages at diagnosis and time since diagnosis (Table 6).

Factors associated with PTG (multiple regression analysis)

The multiple regression analysis using the forced input method was performed using the PTGI-J total score and each subscale score as the dependent variables, and the variables found to be associated with the PTGI-J total score in the single regression analysis as the independent variables. In addition, among the items with significant associations in the single regression analysis, reflective coping showed a correlation coefficient of 0.60 or higher with proactive and strategic planning, so eight items that excluded reflective coping

were placed as independent variables for the multiple regression analysis to avoid multiple collinearity. The results extracted proactive coping (P=0.006), emotional support seeking (P=0.004), and avoidance coping (P=0.001) as factors affecting PTG in breast cancer patients, explaining 37.8% of the variance (Table 7). Further, multiple regressions using each subscale of the PTGI-J as the dependent variable extracted emotional support seeking and avoidance coping, explaining 29.9% of the variance. In the new possibilities, proactive coping of the PCI-J was extracted, explaining 19.4% of the variance. In both the personal strength and spiritual change and appreciation of life, proactive coping, emotional support seeking, and avoidance coping were extracted, the former explaining 29.8% of the variance and the latter 22.9% of the variance.

Discussion

The correlation between PTGI-J and GHQ was calculated using Pearson correlation coefficient; the results showed negative linear relationships between PTG and impaired social activity and depressive tendency. An analysis using cross-sectional data from three months after diagnosis for the association between PTG and QOL in cancer patients suggests that there is a negative linear correlation between PTG and QOL. However, there is a curvilinear relationship between depressive symptoms and PTG at the same time point, with patients with low and high PTG reporting weaker depressive symptoms and those with medium PTG reporting stronger depressive symptoms (22). The results of a meta-analysis of studies addressing the relationship between PTG and PTSD also reported a positive linear correlation between PTG and PTSD, but an even stronger inverted U-shaped curve relationship as significant (23). The present research yielded different results regarding the curvilinear relationships, similar to those of previous studies. This

might be due to the limited sample size used in this study. When examining the relationship between PTG and mental well-being, it is necessary not to assume a linear relationship only, but to take into account the possibility of a curvilinear relationship.

Multiple regression analysis revealed proactive coping, emotional support seeking, and avoidance coping as factors influencing PTG in patients with primary breast cancer. Previous studies of cancer patients have suggested that higher PTG is experienced when they actively address their disease. It has also been reported that social support is a necessary condition for cancer patients to actively cope with their diagnosis (24). Proactive coping was the most influencing factor in PTG, which is based on voluntary goals and links cognition and action. Schwarzer (9) states that proactive individuals strive to improve their lives and environments, rather than responding to previous or anticipated adversities. Improvement of one's own life and the environment is not considered to be a negative understanding of breast cancer by being diagnosed and confronted with the disease, but rather as a flexible change in the way the condition made the person grasp their surroundings to establish a new life. Individuals cannot control whether they are diagnosed with breast cancer; however, (10) taking responsibility for the consequences of the events that occurred to oneself may enhance proactive coping and consequently influence PTG. In a study by Lisica et al. (25), proactive coping and optimism have been reported to be associated with PTGI, strength as a human, and gratitude for life (25). Our results showed that proactive coping was associated with three of the PTGI-J subscales other than relationships to others, consistent with the results of previous studies. In other words, in the context of cancer diagnosis and treatment, actively addressing problems with high self-esteem, flexibility to change one's priorities, and focusing on the new possibilities of the self, seems to enhance PTG (25).

Previous studies revealed that women report higher emotional support seeking than men

(10). This suggests that women are more likely to use social support as a coping strategy when dealing with stress. In addition, an association between social support and PTG has been shown (5, 26–28). In this study, emotional support seeking was also a factor affecting PTG, and the results of multiple regressions using PTGI subscales as dependent variables also showed that emotional support seeking was associated with relationships to others, consistent with previous studies (29). The idea of a growth model that assumes the position of reinforcing factors for becoming healthy suggests that it is also meaningful for the person to make distressing ruminations, indicating that the presence of a person who hears the person's narrative warmly becomes a major force (30). From these facts, we can infer that it is important for people to talk about their worries with confidantes when dealing with stress and that increased PTG can be expected by seeking support in such emotional aspects. In supporting individuals in challenging situations, Tedeschi et al. (31) suggest that supporters need to believe in the coping abilities and resilience that humans have when facing difficulties, without overlooking the signs that survivors show when trying to grow; developing such sensitivities is critical for supporters.

Avoidance coping, which involves not performing any specific action, was shown to be a factor affecting PTG. It is often captured negatively and has been reported to increase stress responses or negative emotions (32-34). Meanwhile, there are reports that avoidance coping reduces stress and can be adaptive, depending on how it is used (35, 36). As a mechanism by which PTG occurs, people experience events in which their core beliefs are shaken, often associated with emotional distress. Immediately after the event, there is a process of automatic, intrusive thinking and rumination. In an attempt to alleviate the distress, PTG is said to arise through self-disclosure and self-analysis as a result of a variety of coping strategies, distraction, talking to people, and changing the intrusive mindset to a more positive one (37). Given this, the process of PTG may also require

temporary avoidance coping. In previous studies, avoidance coping has been reported to have aspects of attenuating psychological stress responses through mood relief (38). In other words, while moderately alleviating emotional distress such as anxiety through avoidance coping, PTG needs to be coupled with challenges to be solved, which should be addressed fundamentally by proactive coping. In light of these findings, it is necessary to ensure reassurance that short-term stress, such as daily anxiety, arising during a long treatment process after a breast cancer diagnosis, should be relieved by using temporary avoidance coping. In addition, it is suggested that the introduction of support, mainly during proactive coping, preserves mental well-being. Additionally, preparing the environment in which the support can be obtained in relation to the reliable person/supporter is important in order to utilize emotional support seeking.

This study has some limitations. First, the subjects of this study were patients with primary breast cancer at a single institution. Consequently, results cannot be applied to all breast cancer patients and should be interpreted with caution. Second, the PTGI-J, used in this study, is focused on “cognition,” and thus we did not investigate how PTG in breast cancer patients are changing as “behaviors” or at the behavioral level. Third, this is a cross-sectional study focused on how patients themselves changed at the time of the survey, looking back at the time of the diagnosis of breast cancer, and comparing their status before and at the time of the survey. Therefore, a possible recall bias cannot be denied. Longitudinal studies are needed to assess objective changes at the behavioral level, including interventions such as stress management, to promote PTG, and surveys administered before and after the interventions. However, it cannot be said that the changes in individual growth that result from mental struggle are accompanied by changes at the behavioral level. Therefore, it is important to focus on studying changes at a given moment through cross-sectional studies to accumulate knowledge, emphasizing on

changes in individual growth.

This study revealed that proactive coping, emotional support seeking, and avoidance coping influenced PTG in primary breast cancer patients. These results suggest that proactive coping can be used for conflicts caused by a diagnosis of breast cancer and that temporary avoidance coping for daily stresses during the course of treatment can enhance PTG while preventing deterioration in mental well-being. Additionally, it was shown that emotional support seeking was important.

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Table 1. Basic attributes

Item	Category	N (%)
Sex	Female	80 (100)
Age	30s	1 (1.3)
	40s	25 (31.3)
	50s	21 (26.3)
	60 or more	33 (41.3)
Marital status	Married	63 (78.8)
	Unmarried	7 (8.8)
	Bereavement	4 (5.0)
	Divorced	6 (7.5)
Form of residence	Cohabitation	73 (91.3)
	Living alone	7 (8.8)
Number of close friends	Few	6 (7.5)
	1	13 (16.3)
	2–3	35 (43.8)
	4–5	23 (28.7)
	6–10	2 (2.5)
	11 or more	1 (1.3)
Time since diagnosis	6 months to less than 1 year	5 (6.3)
	1 year or more and less than 3 years	37 (46.3)
	3 years and less than 5 years	34 (42.5)
	Greater than 5 years	4(5.0)
Stage	Stage0	11 (13.8)
	StageI	30 (37.5)
	StageII	24 (30.0)
	StageIII	5 (6.3)
	StageIV	2 (2.5)
	Do not know	8 (10.0)

Table 2. Descriptive statistics for each variable of the subjects

Variable	Score range	Mean (SD)	SE	alpha
PTGI-J total	0–90	38.60 (20.14)	2.253	0.786
Relating to others	0–30	14.15 (7.27)	0.813	0.776
New possibilities	0–20	7.40 (5.80)	0.649	0.784
Personal strength	0–20	7.99 (5.51)	0.617	0.785
Spiritual change and appreciation of life	0–20	9.06 (5.43)	0.607	0.784
Proactive coping	1–56	36.00 (6.11)	0.683	0.789
Reflective coping	1–44	30.90 (4.80)	0.537	0.792
Strategic planning	1–16	10.70 (1.91)	0.215	0.802
Preventive coping	1–40	27.45 (4.91)	0.549	0.792
Instrumental support seeking	1–32	21.61 (4.20)	0.470	0.798
Emotional support seeking	1–20	14.50 (2.56)	0.287	0.799
Avoidance coping	1–12	8.01 (1.53)	0.172	0.804
GHQ28 total	0–28	5.15 (4.68)	0.524	0.817
Physical symptoms	0–7	1.83 (1.71)	0.192	0.809
Anxiety and insomnia	0–7	2.18 (1.88)	0.210	0.810
Impaired social activity	0–7	0.60 (1.28)	0.144	0.811
Depressive tendency	0–7	0.55 (1.32)	0.148	0.811

SD: standard deviation, SE: standard error of the global mean, alpha: Cronbach's alpha coefficient

Table 3. Correlation between PTGI-J and GHQ

	1	2	3	4	5
1. PTGI-J	—	0.021	0.011	-0.231*	-0.239*
2. Physical symptoms		—	0.444**	0.174	0.188
3. Impaired social activity			—	0.541**	0.547**
4. Impaired social activity				—	0.651**
5. Depressive tendency					—

Pearson correlation coefficient, *: $P < 0.05$, **: $P < 0.01$

Table 4. Correlation between PTGI-J and PCI-J

	1	2	3	4	5	6	7	8
1. PTGI-J	—	0.396**	0.317**	0.278**	0.344**	0.302**	0.472**	0.399*
2. Proactive coping		—	0.627**	0.376**	0.387**	0.145	0.230*	-0.059
3. Reflective coping			—	0.657**	0.475**	0.202	0.251*	0.230*
4. Strategic planning				—	0.435**	0.403**	0.262*	0.310**
5. Preventive coping					—	0.381**	0.356**	0.232*
6. Instrumental support seeking						—	0.605**	0.353**
7. Emotional support seeking							—	0.303**
8. Avoidance coping								—

Pearson correlation coefficient, *: $P < 0.05$, **: $P < 0.01$

Table 5. Associations between time since diagnosis, stage at diagnosis, PTGI-J, GHQ, and PCI-J subscales

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Time since diagnosis	—	0.246*	-0.009	-0.091	-0.124	-0.152	-0.186	-0.141	-0.031	-0.033	0.021	0.166	0.049	-0.062	-0.077	-0.096	0.018
2. Stage		—	-0.044	-0.116	-0.171	0-.150	-0.070	0.030	0.157	0.181	-0.225*	-0.286*	-0.249*	-0.075	0.001	0.005	-0.157
3. Relating to others			—	0.607**	0.607**	0.579**	0.056	0.028	-0.206	-0.166	0.264*	0.283*	0.272**	0.337**	0.380**	0.494**	0.404**
4. New possibilities				—	0.669**	.588**	-0.016	-0.052	-0.226*	-0.265*	0.375**	0.204	0.257*	0.248*	0.250*	0.333**	0.248*
5. Personal strength					—	.568**	0.000	0.019	-0.170	-0.169	0.341**	0.206	0.179	0.267*	0.133	0.347**	0.395**
6. Spiritual change and appreciation of life						—	0.022	0.041	-0.170	-0.211	0.370**	0.371**	0.211	0.287**	0.207	0.383**	0.273*
7. Physical symptoms							—	0.444**	0.174	0.188	0.025	0.019	-0.066	-0.012	-0.017	-0.083	0.106
8. Impaired social activity								—	0.541**	0.547**	-0.135	-0.184	-0.210	-0.174	-0.084	-0.039	0.039
9. Impaired social activity									—	0.651**	-0.138	-0.070	-0.208	-0.081	-0.165	-0.084	-0.208
10. Depressive tendency										—	-0.251*	-0.113	-0.209	-0.056	-0.176	-0.030	-0.016
11. Proactive coping											—	0.627**	0.376**	0.387**	0.145	0.230*	-0.059
12. Reflective coping												—	0.657**	0.475**	0.202	0.251*	0.230*
13. Strategic planning													—	0.435**	0.403**	0.262*	0.310**

14. Preventive coping	—	0.381**	0.356**	0.232*
15. Instrumental support seeking		—	0.605**	0.353**
16. Emotional support seeking			—	0.303**
17. Avoidance coping				—

Pearson correlation coefficient, *: $P < 0.05$, **: $P < 0.01$

Table 6. Factors associated with PTG -Single regression analysis-

Factors			Correlation coefficient	P Value*
Time since diagnosis			-0.105	0.178
Stage at diagnosis			-0.136	0.114
Physical symptoms			0.021	0.425
Anxiety and insomnia			0.011	0.461
Impaired social activity			-0.231	0.019
Depressive tendency			-0.239	0.016
GHQ total			-0.119	0.147
Proactive coping			0.396	<0.001
Reflective coping			0.317	0.002
Strategic planning			0.278	0.006
Preventive coping			0.344	0.001
Instrumental support seeking			0.302	0.003
Emotional support seeking			0.472	<0.001
Avoidance coping			0.399	<0.001
Factors		N	Mean (SD)	P-value**
Age				0.570
	20–49 years	26	40.46 (20.15)	
	50–70 years	54	37.70 (20.27)	
Marital status				0.083
	Married	63	36.57 (19.54)	
	Unmarried, bereaved, or divorced	17	46.12 (21.14)	
Form of residence				0.941
	Cohabitation	73	38.55 (19.72)	
	Living alone	7	39.14 (26.02)	
Number of close friends				0.209
	Not more than 5	77	38.04 (19.85)	
	6 or more persons	3	53.00 (27.07)	

*: Pearson correlation coefficient, **: *t*-test, SD: standard deviation

Table 7. Factors associated with PTG -multiple regression analysis-

Independent variable	Standardized coefficient (β)	P	T	VIF
Impaired social activity	0.004	0.976	0.030	1.870
Depressive tendency	-0.179	0.152	-1.446	1.940
Proactive coping	0.300	0.006	2.806	1.450
Strategic planning	-0.061	0.582	-0.553	1.551
Preventive coping	0.083	0.445	0.769	1.481
Instrumental support seeking	-0.114	0.357	-0.926	1.912
Emotional support seeking	0.348	0.004	2.985	1.727
Avoidance coping	0.349	0.001	3.378	1.355
			Adjusted R^2=0.378	